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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (previously presented) A method of radio resource management comprising the steps of:

    determining periodically a network cost for current network blocking rates for data and voice traffic based on predetermined target blocking rates, and

    adjusting a partition of voice and data traffic to minimize the network cost.

2.   (cancelled)

3.   (original) A method as claimed in claim 1 wherein the adjusting step adjusts the partition of voice and data traffic iteratively.

4.   (previously presented) A method as claimed in claim 1 wherein the network cost is determined as:

$$Cost = W_v \times [f_v(T_v, T_d) - P_{Bv}{}^*]^P + W_d \times [f_d(T_v, T_d) - P_{Bd}{}^*]^P$$

where:
- T_v and T_d are maximum fractions of resource partitioning values for voice and data, respectively;

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- W_v and W_d are positive constants representing the relative weighing of voice vs. data;

- $f_v(T_v, T_d)$ and $f_d(T_v, T_d)$ are the current estimated blocking rates for voice and data traffic, respectively;

- P_{Bv}^* and P_{Bd}^* are the target blocking rate for voice and data respectively;

- P is a positive number; and

- the function [x] is equal to x for positive x and is equal to 0 for non-positive x.

5.   (original) A method as claimed in claim 4 further comprising the step of updating the partition of voice and data based on the value of the network cost.

6. -10 (cancelled)

11.   (previously presented) A method of radio resource arrangement comprising the steps of:

receiving a request for a data burst to be transmitted;

determining power requirement for the data burst at a plurality of possible transmission rates;

assigning a highest priority to the data burst requests serviceable at a maximum transmission rate with a minimum power requirement;

storing data burst requests in queues based on priority levels; and

transmitting the data burst having a maximum transmission rate and a minimum power requirement;

wherein the data burst is chosen based on a comparative decision amongst currently contending data burst users.

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12.   (previously presented) A method of radio resource management
comprising the steps of:

> assigning a maximum burst rate and a corresponding minimum burst
> duration to a user in a wireless network with a plurality of data users;

> equalizing a rate of transmitted information by adaptively allocating the
> user a second burst duration with a corresponding second burst rate,
> the second burst rate being lower than the maximum burst rate, so that
> the product of the second burst rate and the second burst duration is
> equal to the product of the maximum burst rate and the corresponding
> minimum burst.

13.   (cancelled)

14.   (previously presented) A method of radio resource management
comprising the steps of:

> measuring an existing interference for an active user in a wireless
> network with a plurality of users having a pool of burst rates; and

> granting a highest possible burst rate for transmission from the pool of
> burst rates without adding significantly to the interference level.

15.   (previously presented) A method as claimed in claim 14 wherein the
interference is measured and reported to a controller.

16.   (previously presented) A method as claimed in claim 14 further
comprising the step of excluding high burst rates in the pool from
transmission, when the interference is high.

17.   (previously presented) A method as claimed in claim 14 further
comprising the step of expanding the pool of burst rate size to include high
burst rates for transmission, when the interference is low.

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18.   (previously presented) A method of radio resource management
comprising the steps of:

> computing an ordered list of available transmission rates for an active
> user in a wireless network with a plurality of users;
>
> receiving a request for a transmission of a data burst from the user;
>
> obtaining a quality of service requirement for the transmission of the
> data burst;
>
> acquiring a buffer status for the transmission of the data burst;
>
> selecting a lowest rate from the ordered list;
>
> calculating a required time for the transmission of the data burst using
> the lowest rate; and
>
> transmitting the data burst
>
> whereby the required time is below an allowed maximum burst
> duration.

19.   (previously presented) A method as claimed in claim 18 further
comprising the steps of:

> selecting a next lowest rate from the ordered list; and
>
> calculating a next required time for the transmission of the data burst
> using the next lowest rate;
>
> whereby the required time is above and the next required time is below
> the allowed maximum burst duration.

20.   (cancelled)

21. -26. (withdrawn)